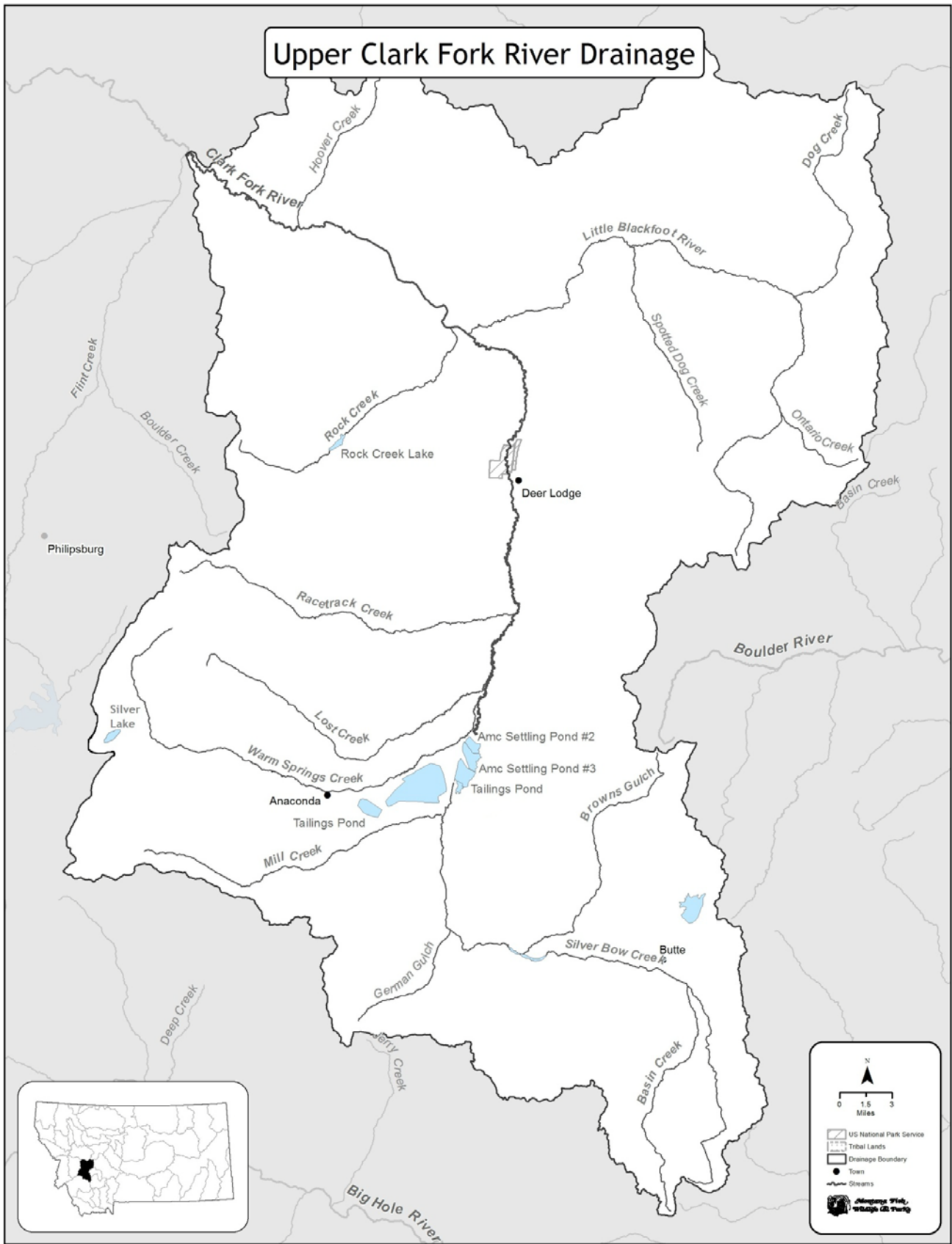


Upper Clark Fork River Drainage



UPPER CLARK FORK RIVER DRAINAGE

PHYSICAL DESCRIPTION

The Upper Clark Fork River drainage lies near the heart of western Montana, and extends from its headwaters near Butte downstream to the mouth of Flint Creek.. The drainage includes the uppermost segment of the Clark Fork River and its tributaries, including Silver Bow Creek, Warm Springs Creek, and the Little Blackfoot River. The Clark Fork River begins at the junction of Silver Bow and Warm Springs Creeks, near the small community of Warm Springs. From its headwaters, the river flows northwesterly for approximately 70 miles through Deer Lodge, Powell, and Granite Counties. The Upper Clark Fork is bordered throughout much of its length by the Garnet Mountains to the north and east and the Flint Range to the south and west. The first 40 miles of the river meander through the flat plains of the Deer Lodge Valley where agriculture is the primary land use. Downstream from the mouth of the Little Blackfoot River, the Upper Clark Fork enters a narrow canyon. In this area the river channel has also been shortened by highway and railroad construction activities. However, downstream of Jens the river moves away from the transportation corridor and begins to meander downstream to its confluence with Flint Creek.

There are 76 lakes and reservoirs in the drainage, totaling 4,468 surface acres. Most natural lakes are mountain lakes in the Anaconda-Pintler and Flint Mountain Ranges. These lakes range in size from less than an acre to over 75 acres. A number of these lakes have been fitted with dams to increase storage capacity for downstream agricultural and industrial water users. The largest reservoirs in the drainage are the Warm Spring Settling Ponds, which are located near the beginning of the Clark Fork River, and Silver Lake, which is located at the head of the Warm Springs Creek drainage not far from the community of Anaconda.

FISHERIES MANAGEMENT

Located in the west-central part of the state, the Upper Clark Fork has a long history of mining related impacts that have negatively affected the fishery and aquatic resources along much of the river. This has led to the stream being one of the more underutilized rivers in western Montana. However, ongoing environmental cleanup by the State and the U.S. Environmental Protection Agency, as well as a diversity of recreational opportunities, has contributed to an increase in the Upper Clark Fork's popularity in recent years.

The Upper Clark Fork River is managed as a wild trout fishery, emphasizing natural reproduction. The basin is also the focus of native fish recovery efforts, particularly in the Little Blackfoot, Warm Springs and Silver Bow drainages. The Upper Clark Fork is home to ten native fish species including bull trout, westslope cutthroat trout, mountain whitefish, longnose and largescale sucker, northern pike minnow, peamouth, longnose dace, redbside shiner, and Columbia slimy sculpin. Nonnative fish species with widespread distribution in the Upper Clark Fork include brown trout, rainbow trout, and brook trout. Nonnative lake trout and kokanee salmon can also be found in Silver Lake and Georgetown lakes, respectively. Dominant fish species vary from westslope cutthroat and brook trout in the headwaters, to brown trout in the Clark Fork River and the lower reaches of valley-bottom tributary streams.

Bull trout are very rare in the mainstem of the Upper Clark Fork River above Flint Creek. The species is primarily isolated in the Warm Springs Creek drainage near Anaconda. Bull trout historically occurred in other drainages such as the Little Blackfoot and Racetrack Creek, but fish are rare to absent in these areas at present. Most of the populations in the Warm Springs Creek drainage appear to be genetically isolated from these other drainages, with little intermixing occurring. Fluvial forms are rare. Adfluvial forms exist in Silver and Twin Lakes. Resident forms exist in most of the larger tributaries upstream of Anaconda including Barker, Foster, Twin Lakes, and Storm Lake Creeks.

Westslope cutthroat trout are present in many of the tributary streams in the Upper Clark Fork. Angling restrictions and habitat improvements in the Little Blackfoot and Silver Bow drainages have sought to improve westslope cutthroat numbers in these areas in particular. Many of the cutthroat populations in the Upper Clark Fork show little to no hybridization with introduced rainbow trout. Additionally, fluvial forms still remain in a number of locations. While westslope cutthroat trout are relatively uncommon in the mainstem of the Upper Clark Fork River, the species does provide a unique fishing opportunity in a river largely dominated by brown trout. Information is lacking on the abundance and life histories of mountain whitefish and non-game native fishes. Efforts are needed to describe these and monitor trends.

Angling in the Upper Clark Fork River occurs year-round and is most popular in the early spring, summer and fall. Opportunities exist for both wade and float angling and while fly-fishing is particularly popular, use of artificial lures and bait fishing are also common.

Lowland ponds and reservoirs provide valuable recreational fisheries. The Warm Springs and Job Corp Ponds are stocked primarily with rainbow trout, but westslope cutthroat trout and brown trout are also planted into some waters. Warm Springs Pond #3 is a popular location where anglers go to pursue trophy-sized trout. Racetrack Pond and the Kids Pond at the Warm Springs Wildlife Management Area are both stocked with rainbow and/or westslope cutthroat trout and have special fishing regulations that seek to provide quality angling opportunities for youth anglers.

A number of high mountain lakes are stocked with westslope cutthroat trout. Lakes currently planted on a regular basis include Alpine, Alibicaulis, Little Racetrack, and Upper and Lower Barker Lakes. Other lakes are planted on a more irregular basis depending on need, while other lakes are kept fishless to help conserve amphibian populations.

HABITAT

The Upper Clark Fork Basin has a long history of human disturbance beginning in earnest in the mid 1800s when placer mining for gold began on many basin streams. By 1896, copper had become the target metal and mining and smelting operations near the town of Butte, located near the headwaters of the Clark Fork, were processing thousands of tons of copper ore per day. Mining and smelting activities in the Butte and Anaconda areas continued into the early 1980s, and while some mining activity still persists near Butte to this day, most of the operations have now been completely shut down and abandoned. Nevertheless, the environmental consequences of over 100 years of large scale mining activity in the Upper Clark Fork Basin have left their mark. Enormous amounts of fine material, mostly mine tailings, were released into the drainage,

and were transported and deposited downstream. These tailings, containing heavy metals, proved toxic to aquatic life and negatively altered the aquatic biological community of the upper river.

For years, the Upper Clark Fork River was considered void of fish. It wasn't until efforts were made to retain and prevent the downstream movement of some portion of the toxic tailings in the Warm Springs Treatment Pond System that water quality improved to a level where trout could begin to re-colonize the lower sections of the river, upstream of Missoula. However, by that time, most of the trout in the river were nonnative species, including rainbow and brown trout. Brown trout have been shown to have a higher tolerance to metals and degraded habitat conditions than other trout species, and it is likely because of this that the species dominates the current trout community in much of the Upper Clark Fork River. While trout are fairly common in the upper river today, past research has shown that trout populations are only one fifth of what would be expected without contamination from mining wastes.

The Clark Fork River from its headwaters to the former Milltown Dam site was designated a Superfund Priority Site in 1986. While cleanup activities have been underway for a number of years on Silver Bow Creek near Butte as well as at Milltown Dam near Missoula, active remediation is only just beginning on the mainstem Clark Fork River. Cleanup of metals-contaminated soils along the Upper Clark Fork River is expected to improve water quality and allow for more tolerable conditions for fish and other aquatic life.

Other factors that affect habitat quality in the Upper Clark Fork include mid-summer dewatering. Irrigation withdrawal can have severe impacts on summer stream flows in the river upstream of Deer Lodge, especially during drought years. Low flows increase water temperatures to levels not suitable for trout, and extensive algae and aquatic plant growth impact dissolved oxygen levels along much of the river.

FISHING ACCESS

In the Upper Clark Fork above Flint Creek, there are relatively few FWP-owned or managed fishing access sites. Designated fishing access sites are located at Kohrs Bend upstream of Garrison, as well as on the lower Little Blackfoot River. There are additional public properties that serve as river and stream access, but these lands are not specifically managed for fishing access. Examples are MDT and county bridge crossings, DNRC and USFS ownership.

Regulations prohibit float fishing in the segment of the Clark Fork River from its beginning to the Perkins Lane Bridge, a distance of approximately three miles.

SPECIAL MANAGEMENT ISSUES

In recent years, recreational use of the Upper Clark Fork River has increased steadily. This is likely due to significant press related to ongoing and future efforts to restore the river's health from the devastating effects of mining contaminants on the river for more than a century. While much of the work still needs to be accomplished, the desire for a clean river to recreate on is apparent. Planning efforts by the Department of Justice (Natural Resource Damage Program), FWP, and others are underway to hopefully address the need for additional fishing access sites in the Upper Clark Fork.

FISHERIES MANAGEMENT DIRECTION FOR UPPER CLARK FORK RIVER DRAINAGE

Water	Miles/acres	Species	Origin	Management Type	Management Direction
Silver Bow Creek and Tributaries	25 miles mainstem plus tributaries	Westslope cutthroat trout	Wild	Conservation/ Special Regulations	Eliminate harvest and enhance fluvial populations for conservation and catch-and-release angling. Promote connectivity among tributary populations.
		Brook trout, Rainbow trout, Brown trout	Wild	General	Manage for the recovery of westslope cutthroat trout by continuing to allow liberal harvest of nonnative trout. Consider other options to reduce nonnative trout numbers if options are practical and would increase native trout density.
Habitat needs and activities: Clean up of mining contamination throughout reach. Increase instream flow and enhance habitat to support ecosystem function and production of native trout. Improve water quality of Butte Metro Sewage Treatment Plant discharge. Install a barrier on the mainstem (just below German Gulch) to prevent colonization of brown trout and rainbow trout, and allow for a westslope cutthroat trout fishery to develop.					
Warm Springs Creek and Tributaries	30 miles mainstem plus tributaries	Bull trout	Wild	Conservation	Continue yearlong closure on angling for bull trout. Enhance migratory and resident populations for conservation.
		Westslope cutthroat trout	Wild	Conservation	Preserve existing genetics in currently isolated resident populations. Improve migratory populations for angling and conservation.
		Brown trout, brook trout, Rainbow trout	Wild	General	Manage for harvest opportunity and reduce numbers to lessen competition, hybridization with, and predation on native trout. Above Meyers Dam, consider other options to reduce numbers if options would increase native trout density and WCT angling opportunity.
Habitat needs and activities: Clean up of mining contamination downstream of Anaconda. Secure instream flow and enhance habitat to support ecosystem function and production of trout and whitefish. Manage connectivity to favor native trout, particularly bull trout.					
Silver Lake	300 acres	Bull trout	Wild	Conservation	Continue yearlong closure on angling for bull trout. Enhance adfluvial population for conservation.
Continued on next page		Westslope cutthroat trout	Wild	General	Enhance population for conservation and to provide angling opportunity.

Water	Miles/acres	Species	Origin	Management Type	Management Direction
		Rainbow trout, Brook trout, Lake trout	Wild	General	Allow liberal harvest to reduce competition and hybridization with, and predation on native trout. Consider other options to reduce numbers if options would increase native trout density and WCT angling opportunity.
Habitat needs and activities: Better public access needed. Manage connectivity with Storm Lake Creek to favor adfluvial bull trout moving upstream to spawn. Pursue leasing or purchasing stored water to supplement Warm Springs Creek and the Clark Fork River.					
Clark Fork River Headwaters Downstream to Confluence with Flint Creek.	70 miles	Bull trout, Westslope cutthroat trout	Wild	Conservation/ Special Regulations	Continue yearlong closure on angling for bull trout. Enhance migratory populations for conservation. Enhance catch-and-release westslope cutthroat trout fishery.
		Brown trout, Rainbow trout, Brook trout	Wild	Quality/ Special Regulations	Manage harvest to support quality angling opportunity. Ensure adequate connectivity with important spawning tributaries to provide for natural recruitment.
Habitat needs and activities: Clean up mining contamination throughout reach. Enhance instream flow. Enhance connectivity with tributaries where appropriate. Protect and improve habitat quality in spawning and rearing areas to enhance natural recruitment of wild and native trout and whitefish.					
Warm Springs and Job Corps Ponds	897 acres	Rainbow trout, Brown trout, Westslope cutthroat trout (species not present in all ponds)	Hatchery	Quality/ Put-Grow-Take	Restrict trout harvest and manage stocking densities to promote quality catch-and-release angling opportunity for large trout.
Habitat needs and activities: Improve water quality of ponds. Slow eutrophication process by improving water quality of Butte Metro Sewage Treatment Plant discharge. Understand the effects of stored contaminants on the biota in and downstream of the Warm Springs Ponds.					
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Water	Miles/acres	Species	Origin	Management Type	Management Direction
Racetrack Pond Kids Pond at Warm Springs Wildlife Management Area Gravel Pit Pond adjacent to Highway 48	45 acres	Rainbow trout, Westslope cutthroat trout	Hatchery	Family Fishing/ Put- Take/ Special Regulations	Encourage youth angling through special regulations (Racetrack Pond and Warm Springs WMA Kids Pond), or special fishing day events (Gravel Pit Pond). Manage stocking densities and trout harvest to promote quality angling opportunity for stocked trout.
Little Blackfoot River and Tributaries	50 miles mainstem plus tributaries	Westslope cutthroat trout	Wild	Conservation/ Special Regulations	Eliminate harvest and conserve and enhance migratory and resident populations for conservation and catch-and-release angling. Consider isolation of local populations only if hybridization or competition is a threat and habitat and fish numbers are sufficient to allow persistence.
		Brown trout, Brook trout, Rainbow trout	Wild	General/Suppression	Manage for harvest opportunity and reduce numbers to lessen competition and hybridization with, and predation on native trout, particularly above Elliston where westslope cutthroat trout are abundant. Consider other options to reduce numbers if they would increase native trout density and angling opportunity.
Habitat needs and activities: Protect and improve habitat to support ecosystem function and natural production of native trout and whitefish. Manage connectivity to favor native trout.					
Tributaries to Upper Clark Fork River Above Confluence with Flint Creek, Other Than Those Specifically Listed Continued on next page	---	Westslope cutthroat trout	Wild	Conservation	Enhance populations for conservation and recruitment to the Clark Fork River sport fishery. Maintain currently isolated (or consider isolating) populations only if hybridization or competition is a threat and habitat is sufficient to allow persistence. Preserve connectivity with streams currently connected to allow for maintenance of migratory life histories. Monitor these populations closely for hybridization and/or competition threats.

Water	Miles/acres	Species	Origin	Management Type	Management Direction
		Brown trout, Rainbow trout, Brook trout	Wild	General	In streams with westslope cutthroat trout, continue to allow liberal harvest to reduce competition, hybridization and predation. Consider other options to reduce numbers if options and would increase native trout numbers and angling opportunity. Where native species concerns are not present, enhance migratory populations to improve recruitment to recreational fishery in the Clark Fork River.
<p>Habitat needs and activities: Protect and improve habitat to support ecosystem function and natural production of trout. Manage connectivity to favor native trout.</p>					

